

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1 Claim 1 (currently amended) An ink-drop generator
2 for an inkjet printer in which an inkjet is sprayed in
3 drops, said generator particularly comprising:
4 - a generator body,
5 - at least one acoustic wave generator with a body
6 elongated in an axial direction to the inkjet, each
7 generator having a vibrating surface perpendicular to the
8 axial direction of the jets, at least one section
9 comprising the vibrating surface of each acoustic
10 generator being housed in a housing of the drop-generator
11 body,
12 - at least one resonance cavity intended to contain
13 ink, the acoustic-wave generator housing and the cavity
14 being connected by a hollow connector section, a first
15 section only of each cavity possibly being constituted in
16 a main section of said generator body and, in this
17 configuration, a second section in a continuation of said
18 generator body connected to be leaktight to the generator
19 body, each cavity having an ink feed, each cavity being
20 defined particularly by a nozzle plate and a wall, the
21 intersection of the wall and the nozzle plate defining a

22 first plane contour line of the wall, the nozzle plate
23 comprising a plurality of nozzles aligned along an axial
24 direction of the nozzles perpendicular to the axial
25 direction of the jets, the axial direction of the jets
26 and the axial direction of the nozzles defining a plane
27 of the jets,

28 - a generator characterized in that the wall of each
29 resonance cavity is perpendicular to said nozzle plate,
30 the first contour line being formed by two equal segments
31 that are parallel to one another and the axial direction
32 of the nozzles, each segment having two ends: a first and
33 a second end, the two first ends of each segment being
34 connected by a first curved line and the two second ends
35 of each segment being connected by a second curved line.

1 Claim 2 (original) Generator of claim 1
2 characterized in that each curved line is concave towards
3 the inside of the cavity.

1 Claim 3 (original) Generator of claim 2
2 characterized in that the first and second curved lines
3 are constituted by semicircles the diameter of which is
4 the space between the two equal segments.

1 Claim 4 (previously presented) Generator of claim 1
2 characterized in that the largest measurement of the
3 first contour of the cavity lies along the axial
4 direction of the nozzles, the distance between the two
5 segments being approximately 1/4 and the height of the
6 wall being between 1/2 and 31/4.

1 Claim 5 (previously presented) Drop generator of
2 claim 4 characterized in that the acoustic-wave generator
3 has a circular, transverse cross-section the diameter of
4 which is between 1/2 and 31/4.

1 Claim 6 (previously presented) Generator of claim
2 5 characterized in that one part of the acoustic-wave
3 generator housing has an opening having a cross-section
4 the length of which is more or less equal to 1/2.

1 Claim 7 (original) Generator of claim 3
2 characterized in that the ~~acoustic-wave generator housing~~
3 and the cavity are connected by a hollow connector
4 section is defined by a lateral connector surface, said
5 lateral surface having, along the axial line of the jets,
6 a lower limit in the cavity and an upper limit close to
7 the acoustic generator housing, the upper limit of the
8 transverse cross-section of said surface being circular

9 with a diameter equal to that of the acoustic-wave
10 generator housing, the intersections of this surface with
11 the planes parallel to the nozzle plate, these planes
12 being located under the upper limit and above the lower
13 limit, being closed curves the perimeter of which
14 diminishes when the intersection plane moves away from
15 the upper limit

1 Claim 8 (original) Generator of claim 7
2 characterized in that for the sections of the connector
3 surface located in the cavity the intersections of the
4 connector surface with the planes parallel to the nozzle
5 plate comprise two curves symmetrical to one another
6 relative to the jet plane, the ends of each of these
7 curves being separated from each other by the distance
8 between the segments of the first contour.

1 Claim 9 (original) Generator of claim 7
2 characterized in that the connector surface forms an
3 opening between the acoustic-wave generator housing and
4 the cavity, said opening having a cross-section the
5 length of which is more or less equal to $\ell/2$.

1 Claim 10 (original) Generator of claim 7
2 characterized in that at least part of the connector
3 surface is formed by two sections of conical surface that
4 are symmetrical to each other relative to the jet plane.

1 Claim 11 (previously presented) Generator of claim
2 1 characterized in that one of the ink-feed apertures is
3 located at one end and the other at a second end of a
4 segment of the cavity, and an ink outlet opening in the
5 body housing is located at a top of the cavity.

1 Claim 12 (previously presented) Generator of claim
2 1 characterized in that the nozzles of the cavity are
3 equidistant and that the distance between an end nozzle
4 and of an end cavity of the body and a section of the
5 external wall of the body located at the intersection of
6 said wall with the jet plane is shorter than half the
7 distance between two consecutive nozzles of the nozzle
8 plate.

1 Claim 13 (original) Generator of claim 11
2 characterized in that the distance between two end
3 nozzles and two consecutive cavities of the same body is
4 equal to the distance between two consecutive nozzles of
5 the same cavity.

1 Claim 14 (previously presented) Generator of claim
2 13 characterized in that it is equipped with positioning
3 means aligned parallel to the axial direction of the
4 nozzles.

1 Claim 15 (original) Print head characterized in
2 that it comprises an ink generator of claim 12 and a
3 multijet deflector assembly, said assembly comprising
4 charge and deflector electrodes to charge and deflect or
5 not deflect the drops from each jet.

1 Claim 16 (original) Inkjet printer characterized in
2 that it is equipped with a plurality of ink-drop
3 generators of claim 12, the generators being aligned
4 side-by-side such that the distance between an inkjet of
5 an end nozzle of a generator and the closest nozzle of a
6 connected ink generator is equal to the distance between
7 consecutive jets of the same generator.

1 Claim 17 (original) Printer of claim 16
2 characterized in that it comprises a pressurized ink
3 distributor that supplies the various generators with ink
4 via pipes and in that the lengths of said pipes are equal
5 between a distributor outlet and an ink inlet of each

6 generator.

1 Claim 18 (original) Printer of claim 17
2 characterized in that at least part of the pipes are
3 rigid and that the pipes have equal numbers of elbows.

1 Claim 19 (original) Printer of claim 18
2 characterized in that the value of each elbow angle of a
3 pipe is identical on all the other pipes.

1 Claim 20 (original) Printer of claim 18
2 characterized in that the elbows of the pipes form right
3 angles.

1 Claim 21 (original) Printer of claim 16
2 characterized in that it comprises several lines of
3 generators aligned side-by-side, the lines being parallel
4 to one another.